

Switch OFF the nominal SPIRE units  
File: H\_FCP\_SPI\_NSOF.xls  
Author: R. Biggins




Procedure Summary

Objectives

The objective of this procedure is to switch off the nominal SPIRE units

Summary of Constraints

Spacecraft Configuration

Start of Procedure

SPIRE is in DRCU\_OFF mode

End of Procedure

SPIRE is OFF

Reference File(s)

Input Command Sequences

Output Command Sequences

HFSNSOF

Referenced Displays

ANDs	GRDs	SLDs
SA_1_559		
ZAZ08999		
ZAD14999		
ZAZ7E999		

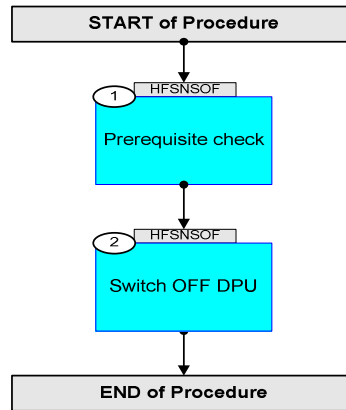
Configuration Control Information

DATE	FOP ISSUE	VERSION	MODIFICATION DESCRIPTION	AUTHOR	SPR REF
12/11/2007		1	Created	R. Biggins	
			Update due to initial testing against the simulator:☐		
15/01/2008		2	- TCs updated due to new DB	R. Biggins	

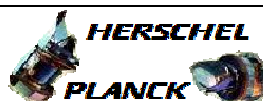
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## Procedure Flowchart Overview



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Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
Beginning of Procedure				
HFSNSOF Switch OFF (Nom)				
SSID :				
1		Prerequisite check		Next Step: 2
		Verify Telemetry  MODE SM00M500	= DRCU_OFF	AND=SA_1_559
2		Switch OFF DPU		Next Step: END
2.1		Disable SDB FDIR		<input type="checkbox"/>
		Execute Telecommand  ConfigureSDBFDIR  Command Parameter(s) :  RTA DH011161 SPIRE A M0 DH030161 Ignore Flag M1 DH031161 Ignore Flag M2 DH032161 Ignore Flag M3 DH033161 Ignore Flag M4 DH034161 Ignore Flag M5 DH035161 Ignore Flag M6 DH036161 Ignore Flag M7 DH037161 Ignore Flag F0 DH018161 ON F1 DH019161 Alive  F2 DH020161 Well TC F3 DH021161 Well TM F4 DH022161 Valid F5 DH023161 Non-vital F6 DH024161 NOMINAL F7 DH025161 ON M_C DH043161 Ignore CNT M8 DH038161 Ignore Flag M9 DH039161 Ignore Flag M10 DH040161 Ignore Flag M11 DH041161 Update status CNT DH042161 LoopCnt1 F8 DH026161 Bus A F9 DH027161 Healthy F10 DH028161 Healthy  F11 DH029161 DISABLED  TC Control Flags :  GBM IL DSE --Y -- ---  SSID : 10	DC005161	
		Wait up to 1 minute		
		Verify: 1553 bus FDIR status SDB_FDIR DEFJ4160	= DISABLED	AND=ZAZ08999

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2.2		Start instrument RT interrogations		<input type="checkbox"/>																																																																																													
		Execute Telecommand <div>ConfigureSDBFDIR</div> Command Parameter(s) : <table><tr><td>RTA</td><td>DH011161</td><td>SPIRE A</td></tr><tr><td>M0</td><td>DH030161</td><td>Update status</td></tr><tr><td>M1</td><td>DH031161</td><td>Ignore Flag</td></tr><tr><td>M2</td><td>DH032161</td><td>Ignore Flag</td></tr><tr><td>M3</td><td>DH033161</td><td>Ignore Flag</td></tr><tr><td>M4</td><td>DH034161</td><td>Update status</td></tr><tr><td>M5</td><td>DH035161</td><td>Ignore Flag</td></tr><tr><td>M6</td><td>DH036161</td><td>Ignore Flag</td></tr><tr><td>M7</td><td>DH037161</td><td>Ignore Flag</td></tr><tr><td>F0</td><td>DH018161</td><td>OFF</td></tr><tr><td>F1</td><td>DH019161</td><td>Alive</td></tr><tr><td colspan="3"></td></tr><tr><td>F2</td><td>DH020161</td><td>Well TC</td></tr><tr><td>F3</td><td>DH021161</td><td>Well TM</td></tr><tr><td>F4</td><td>DH022161</td><td>Invalid</td></tr><tr><td>F5</td><td>DH023161</td><td>Non-vital</td></tr><tr><td>F6</td><td>DH024161</td><td>NOMINAL</td></tr><tr><td>F7</td><td>DH025161</td><td>ON</td></tr><tr><td>M_C</td><td>DH043161</td><td>Ignore CNT</td></tr><tr><td>M8</td><td>DH038161</td><td>Ignore Flag</td></tr><tr><td>M9</td><td>DH039161</td><td>Ignore Flag</td></tr><tr><td>M10</td><td>DH040161</td><td>Ignore Flag</td></tr><tr><td>M11</td><td>DH041161</td><td>Ignore Flag</td></tr><tr><td>CNT</td><td>DH042161</td><td>LoopCnt1</td></tr><tr><td>F8</td><td>DH026161</td><td>Bus A</td></tr><tr><td>F9</td><td>DH027161</td><td>Healthy</td></tr><tr><td>F10</td><td>DH028161</td><td>Healthy</td></tr><tr><td colspan="3"></td></tr><tr><td>F11</td><td>DH029161</td><td>DISABLED</td></tr></table> TC Control Flags : <table><tr><td>GBM</td><td>IL</td><td>DSE</td></tr><tr><td>--Y</td><td>--</td><td>---</td></tr></table> SSID : 10	RTA	DH011161	SPIRE A	M0	DH030161	Update status	M1	DH031161	Ignore Flag	M2	DH032161	Ignore Flag	M3	DH033161	Ignore Flag	M4	DH034161	Update status	M5	DH035161	Ignore Flag	M6	DH036161	Ignore Flag	M7	DH037161	Ignore Flag	F0	DH018161	OFF	F1	DH019161	Alive				F2	DH020161	Well TC	F3	DH021161	Well TM	F4	DH022161	Invalid	F5	DH023161	Non-vital	F6	DH024161	NOMINAL	F7	DH025161	ON	M_C	DH043161	Ignore CNT	M8	DH038161	Ignore Flag	M9	DH039161	Ignore Flag	M10	DH040161	Ignore Flag	M11	DH041161	Ignore Flag	CNT	DH042161	LoopCnt1	F8	DH026161	Bus A	F9	DH027161	Healthy	F10	DH028161	Healthy				F11	DH029161	DISABLED	GBM	IL	DSE	--Y	--	---	DC005161	
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		Verify Telemetry <table><tr><td>SPIREA_OnOff</td><td>DED1G161</td><td>= OFF</td></tr></table>	SPIREA_OnOff	DED1G161	= OFF	= OFF	AND=ZAD14999																																																																																										
SPIREA_OnOff	DED1G161	= OFF																																																																																															
		Verify Telemetry <table><tr><td>SPIREA_ValidInv</td><td>DED1K161</td><td>= Invalid</td></tr></table>	SPIREA_ValidInv	DED1K161	= Invalid	= Invalid	AND=ZAD14999																																																																																										
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2.3		Power OFF DPU		<input type="checkbox"/>																																																																																													
		Execute Telecommand <div>SwOff_SpireHSPDU_N_L11</div> TC Control Flags : <table><tr><td>GBM</td><td>IL</td><td>DSE</td></tr><tr><td>--Y</td><td>--</td><td>---</td></tr></table> SSID : 10	GBM	IL	DSE	--Y	--	---	DC11B170																																																																																								
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		Verify: DPU LCL status <table><tr><td>SpirHsdN_L11_1S</td><td>WM32C565</td><td>= OFF</td></tr></table>	SpirHsdN_L11_1S	WM32C565	= OFF	= OFF	AND=ZAZ7E999																																																																																										
SpirHsdN_L11_1S	WM32C565	= OFF																																																																																															

Step No.	Time	Activity/Remarks	TC/TLM	Display/ Branch
		Verify: DPU LCL current SpireHsN_L11_I WM308565	= 0.0 A	AND=ZAZ7E999
2.4		Re-enable SDB FDIR		<input type="checkbox"/>
		Execute Telecommand ConfigureSDBFDIR Command Parameter(s) : RTA DH011161 SPIRE A M0 DH030161 Ignore Flag M1 DH031161 Ignore Flag M2 DH032161 Ignore Flag M3 DH033161 Ignore Flag M4 DH034161 Ignore Flag M5 DH035161 Ignore Flag M6 DH036161 Ignore Flag M7 DH037161 Ignore Flag F0 DH018161 OFF F1 DH019161 Alive  F2 DH020161 Well TC F3 DH021161 Well TM F4 DH022161 Invalid F5 DH023161 Non-vital F6 DH024161 NOMINAL F7 DH025161 ON M_C DH043161 Ignore CNT M8 DH038161 Ignore Flag M9 DH039161 Ignore Flag M10 DH040161 Ignore Flag M11 DH041161 Update status CNT DH042161 LoopCnt1 F8 DH026161 Bus A F9 DH027161 Healthy F10 DH028161 Healthy  F11 DH029161 ENABLED  TC Control Flags : GBM IL DSE --Y -- --- SSID : 10		
		Wait up to 1 minute		
		Verify: 1553 bus FDIR status SDB_FDIR DEFJ4160	= ENABLED	AND=ZAZ08999
End of Procedure				